# JAVA.LANG.SYSTEM CLASS

## Introduction

The **java.lang.System** class contains several useful class fields and methods. It cannot be instantiated.Facilities provided by System:

- standard output

- error output streams

- standard input and access to externally defined properties and environment variables.

- A utility method for quickly copying a portion of an array.

- a means of loading files and libraries

## Class declaration

Following is the declaration for **java.lang.System** class:

```
public final class System
    extends Object
```

## Field

Following are the fields for **java.lang.System** class:

- **static PrintStream err** -- This is the "standard" error output stream.

- **static InputStream in** -- This is the "standard" input stream.

- **static PrintStream out** -- This is the "standard" output stream.

## Class methods

| S.N. | Method & Description |
|------|----------------------|
| 1 | static void arraycopy(Object src, int srcPos, Object dest, int destPos, int length) <br> This method copies an array from the specified source array, beginning at the specified position, to the specified position of the destination array. |
| 2 | static String clearProperty(String key) <br> This method removes the system property indicated by the specified key. |
| 3 | static Console console() <br> This method returns the unique Console object associated with the current Java virtual machine, if any. |
| 4 | static long currentTimeMillis() <br> This method returns the current time in milliseconds. |
| 5 | static void exit(int status) |

| | | |
|---|---|---|
| | | This method terminates the currently running Java Virtual Machine. |
| 6 | static void gc() | This method runs the garbage collector. |
| 7 | static Map<String,String> getenv() | This method returns an unmodifiable string map view of the current system environment. |
| 8 | static String getenv(String name) | This method gets the value of the specified environment variable. |
| 9 | static Properties getProperties() | This method determines the current system properties. |
| 10 | static String getProperty(String key) | This method gets the system property indicated by the specified key. |
| 11 | static String getProperty(String key, String def) | This method gets the system property indicated by the specified key. |
| 12 | static SecurityManager getSecurityManager() | This method gets the system security interface. |
| 13 | static int identityHashCode(Object x) | This method returns the same hash code for the given object as would be returned by the default method hashCode(), whether or not the given object's class overrides hashCode(). |
| 14 | static Channel inheritedChannel() | This method returns the channel inherited from the entity that created this Java virtual machine. |
| 15 | static void load(String filename) | This method loads a code file with the specified filename from the local file system as a dynamic library. |
| 16 | static void loadLibrary(String libname) | This method loads the system library specified by the libname argument. |
| 17 | static String mapLibraryName(String libname) | This method maps a library name into a platform-specific string representing a native library. |
| 18 | static long nanoTime() | This method returns the current value of the most precise available system timer, in nanoseconds. |
| 19 | static void runFinalization() | This method runs the finalization methods of any objects pending finalization. |
| 20 | static void setErr(PrintStream err) | This method reassigns the "standard" error output stream. |
| 21 | static void setIn(InputStream in) | This method reassigns the "standard" input stream. |
| 22 | static void setOut(PrintStream out) | This method reassigns the "standard" output stream. |
| 23 | static void setProperties(Properties props) | This method sets the system properties to the Properties argument. |

| 24 | static String setProperty(String key, String value)<br>This method sets the system property indicated by the specified key. |
|----|----|
| 25 | static void setSecurityManager(SecurityManager s)<br>This method sets the System security. |

## Methods inherited

This class inherits methods from the following classes:

- java.lang.Object